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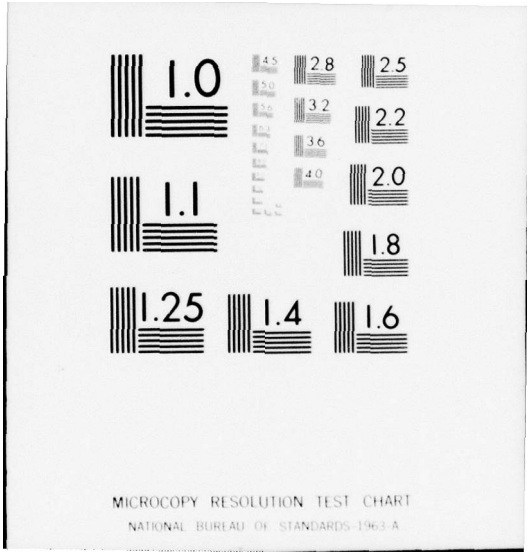
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DEFENSE SYSTEMS MANAGEMENT COLLEGE

PROGRAM MANAGEMENT COURSE
INDIVIDUAL STUDY PROGRAM

THE SATAF APPROACH
FOR DEPLOYMENT

Study Project Report
PMC 76-2

Roy M. Handsel
Major USAF

FORT BELVOIR, VIRGINIA 22060

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER	(9)
4. TITLE *(and Subtitle)*	(6) THE "SATAF" APPROACH FOR DEVELOPMENT
5. TYPE OF REPORT & PERIOD COVERED	Student Project Report, Study 76-2
6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s)	(10) Roy M. Handsel
8. CONTRACT OR GRANT NUMBER(s)	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	DEFENSE SYSTEMS MANAGEMENT COLLEGE FT. BELVOIR, VA 22060
10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS	DEFENSE SYSTEMS MANAGEMENT COLLEGE FT. BELVOIR, VA 22060
12. REPORT DATE	76-2
13. NUMBER OF PAGES	39
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*	(11) Nov 76 (12) 42p.
15. SECURITY CLASS. *(of this report)*	UNCLASSIFIED
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	

16. DISTRIBUTION STATEMENT *(of this Report)*

UNLIMITED

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

SEE ATTACHED SHEET

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

SEE ATTACHED SHEET

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

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SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

DEFENSE SYSTEMS MANAGEMENT COLLEGE

STUDY TITLE:

THE "SATAF" APPROACH FOR DEPLOYMENT

STUDY PROJECT GOALS:

To identify the requirements for the successful deployment of a major USAF weapon system, research directives and other information applicable to this area, identify the agencies responsible for the required actions, and tie the actions to a time phase schedule.

STUDY REPORT ABSTRACT:

The purpose of this report was to examine the Site Activation/Alteration Task Force (SATAF) approach for accomplishment of the deployment phase of a major USAF weapon system. A research for all applicable directives and information pertaining to weapon system deployment was concluded and then condensed in Section II of the study. An in-depth review of the formation of the F-15 aircraft SATAF is presented. The study then focuses on the step-by-step process used by the SATAF II which prepared the first operational F-15 Tactical Fighter Wing. From the data reviewed and personal testimony obtained from interviews with key persons it is conducted that the SATAF II was highly successful and that a similar type organization needs to be used for all major weapon systems deployment.

This report should provide an understanding of the SATAF process and provide information for persons dealing in the deployment phase.

SUBJECT DESCRIPTORS: "SATAF;" F-15 Deployment; Base/Site Activation

DLSIE DESCRIPTORS: F-15; Base Development; Systems Management

NAME, RANK, SERVICE	CLASS	DATE
Roy M. Manasel, MAJOR, USAF	PMC 76-2	November 1976

THE SATAF APPROACH FOR DEPLOYMENT

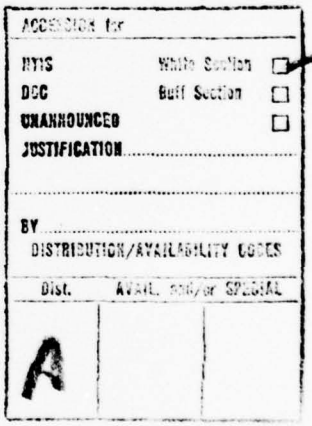
Study Project Report

Individual Study Program

Defense Systems Management College

Program Management Course

Class 76-2



by

Roy M. Handsel
Major USAF

November 1976

Study Project Advisor
Mr. John R. Mathias

EXECUTIVE SUMMARY

The purpose of this study is to examine the Site Acitvation/Alteration Task Force (SATAF) Approach for deployment of a major USAF weapon system.

Prior to the April 1976 revision of AFSC Pamphlet 800-3, there was little direction for the deployment phase of the weapon system acquisition process. This study examines the current directives dealing with deployment and presents a synopsis of all other information which the author was able to find available in this area. The SATAF approach originated in the USAF missile program and was first implemented on a USAF aircraft program in November 1973, by Major General Benjamin Bellis, while he was the Program Manager for the F-15. After much research, the F-15 program office personnel formally established an F-15 SATAF which involved all the commands necessary to successfully prepare a base or "site" for receiving the new F-15 weapon system.

This study presents the step-by-step procedures followed in the SATAF Meetings, held between January and December 1975 to activate the First Tactical Fighter Wing (1 TFW) at Langley AFB, Virginia. From the minutes of these meetings and interviews conducted with the key persons involved, a conclusion is reached that this SATAF was highly successful in preparing the 1 TFW to receive their first F-15's on 10 January 1976. The research and interviews provide the results and lessons learned from the Langley AFB activation and it was concluded that:

(1) A SATAF type organization is needed to effectively plan, coordinate, and implement the deployment of a major weapon system.

(2) Problems need to be surfaced early in the planning stages, systematically approached, and controlled to assure their resolution.

(3) The involvement and commitment of all concerned commands at a time early enough to insure their required support is paramount.

(4) The experience gained during the activation of one site is extremely valuable for future activations and needs to be documented in the form of lessons learned.

The author concludes the study by recommending the SATAF approach for all weapon system deployments of a size or urgency that can possibly afford it.

TABLE OF CONTENTS

SECTION I

INTRODUCTION

Purpose of the Study Report

The primary objective of this study is to increase the author's knowledge and understanding of the Deployment Phase of the Acquisition Process for a major United States Air Force (USAF) weapon system.

A secondary objective is to compile a synopsis of the existing USAF Regulations and any other credible information pertaining to the delivery and turnover of a major system to the using and supporting commands. This synopsis hopefully could be of value to persons newly assigned to positions concerned with deployment activities.

The study subject, "The SATAF Approach for Deployment" will be contained primarily to the activation of the initial F-15 aircraft operational wing. This topic was selected because it was felt that under the present atmosphere of concern by Congress and the American People for the effective control and use of the allocated Defense Budget, there was no other time which was so visible and so critically reflected the effectiveness of the complete Acquisition Program.

The Site Activation/Alteration Task Force (SATAF) approach to weapon system deployment is a program management concept which evolved in the USAF missile program and has been recently applied to aircraft squadron activations. The specific procedures and requirements of this approach are addressed in Section IV of this study.

Approach

The research effort required an investigation of all existing Department of Defense (DOD) and USAF Regulations (AFRs), which might pertain to the Deployment Phase of a weapon system. A review was conducted of Abstracts from the previous Defense Systems Management College (DSMC) Individual Study Program (ISP) Reports and the Defense Documentation Center (DDC) was queried for any applicable studies or theses. The minutes from the F-15 SATAF meetings were studied extensively to compile the required actions and time phases for a successful activation. Interviews were done via telephone to determine the attitudes of the key people involved in the activation of the First Tactical Fighter Wing (1 TFW). This activation group was designated F-15 SATAF II as SATAF I had previously activated an initial training wing at Luke AFB, Arizonia in November 1974.

Limitations

This study was conducted by the author as an additional learning project during his full time attendance at the Defense Systems Management College (DSMC) Program Management Course. The author could not spend time at either the F-15 Project Office at Wright-Patterson AFB, Ohio, or the 1 TFW at Langley AFB, Virginia to conduct an in-depth investigation as to the specific actions which were not accomplished as scheduled. Thus, this study is not intended to be an evaluation of the numbers, seriousness, and causes of the problems encountered by the F-15 SATAF. The author is reviewing the methods used and making his evaluation as to their effectiveness from the verbal interviews of the key persons and his personal observations of the overall results. The 1 TFW has operated the F-15 since January 1976,

and the persons interveiwed can now be "Monday Morning Quarterbacks" and reflect upon the SATAF II effectiveness.

Organization and Method of Presentation

Section II will present a synopsis of the directives and other information pertaining to Deployment that were discovered during research.

Section III gives an accounting of the evolution and membership of the F-15 SATAF.

Section IV and V provide the actions and results of the F-15 SATAF meetings as obtained from the minutes.

Section VI summarizes the need for a SATAF type organization and recommends this approach for other deployments.

SECTION II

REVIEW OF DEPLOYMENT INFORMATION

Directives

A search of directives dealing with United States Air Force (USAF) weapon system deployment revealed that until recently the general trend in publications dealing with acquisition management treated very lightly the Deployment Phase. The following examples illustrate this point:

a. Air Force Regulation 800-2, dated 16 March 1972, and titled, "Program Management" is the basic acquisition management directive and states the policy for management of all Air Force acquisition programs which are funded under Research Development Test and Evaluation (RDT&E) or procurement appropriations. It also implements DOD Directive 5000.1. This important directive simply states that the Program Manager (PM) "assures adequate communication and coordination among all participating organizations." Attachment 3 to this regulation provides only the following definition for the Deployment Phase. "The period beginning with the user's acceptance of the first operational unit and extending until the system is phased out of the inventory. It overlaps the production phase.

b. Most Air Force personnel involved in the acquisition of weapons systems have viewed Air Force Systems Command (AFSC) Pamphlet 800-3, titled, "A Guide For Program Management," as the best

available guidance for the weapons systems acquisition process. However, until it was rewritten in April of 1976, it simply addressed Deployment as a portion of Production. The new revision to AFSC Pamphlet 800-3 has a separate and detailed chapter covering the Deployment Phase. (Chapter 21, "Deployment Management"). Section "B" presents methods to strengthen and improve the deployment management phase and then iterates specific requirements in the areas of transportation, logistics support, facilities support, activation and initial operational capability, and gives guidance for the acceptance of fixed systems and aeronautical systems. It also explains handling of waivers and changes and lists the PM's responsibilities toward community relations and field activities at the deployment locations. Section C, gives guidance for establishment of the "Program Management Responsibility Transfer" (PMRT). Section E is a listing of reference documents that can provide related information. This directive is recommended as the most detailed and up-to-date direction available.

c. Air Force Regulation (AFR) 800-4, "Transfer Program Management Responsibilities," assigns the Program Manager the responsibility of establishing a Turnover and Transition Working Group (TTWG) whenever necessary. This group is to be comprised of representatives from the Implementing, Using, and Supporting Commands. The TTWG is charged with preparing the very important turnover and transition

agreement. This AFR also states some specific tasks and areas of responsibility for the participating organizations and the Implementing Command.

d. Research of directives also uncovered a joint AFSC and Air Force Logistics Command (AFLC) regulation that had been written to provide guidance for the activation of missile systems. It is AFSC/AFLC Regulation 800-11, titled, "Site Activation/Alteration Task Forces (SATAF)." Discussions with personnel of the Space and Missile Systems Office (SAMSO) indicated that they still rely heavily upon this regulation. The SAMSO persons contacted were not aware of the rewrite of AFSC Pamphlet 800-3.

Other Deployment Information

a. Inquiry of the Defense Documentation Center (DDC) for information on the subject of AF systems deployment provided a copy of a thesis by Captain Fredric L. Abrams, titled "Weapon System Acquisition: The Process, Problems, and a Management Approach." CAPT Abrams wrote this study during his membership in the F-15 SATAF and submitted it as partial fulfullment of a Masters Degree. It is dated, October 1974, and is an "in-depth" review of the F-15 SATAF workings and a step-by-step history of the actions required for establishment of the first F-15 training wing. The author of this study was able to gain a substantial amount of information from this product and used it extensively for preparation of Section III of this study. (CAPT Abrams also prepared and submitted a suggested change to AFSC Pamphlet 800-3, and is undoubtedly responsible for its recent revision in the area of Deployment.) This thesis is highly recommended to all persons interested in the deployment area. (Reference #1)

b. Reviews of abstracts of previous DSMC, ISPs revealed the study done by Major David J. Teal (PMC 72-2) on "F-15 Fighter Program Management: Innovations and Lessons Learned." This study does not address the deployment phase and was written prior to the F-15 Program entering the Production Phase. It provides a good review of the F-15 PM responsibilities and management procedures which were very instrumental in the way he set up the SATAF. (Reference #2)

SECTION III

EVOLUTION AND MEMBERSHIP OF F-15 SATAF

Introduction

This section will present the events leading to the formation of a SATAF for the F-15 Systems Program Office (SPO) and establishes its participants or membership. The data presented as the history of the formation of the F-15 SATAF was compiled by CAPT Abrams and presented in his thesis. (Reference #1) CAPT Abrams obtained the data by reviewing the F-15 SPO correspondence and reports, interviewing SATAF members, and his personal interaction as a member in the SATAF beginning in June of 1974. His thesis also provides a comprehensive account of the development of a Turnover Plan by the TTWG. This plan is very closely related to the SATAF activities and was used extensively, but will not be reviewed in this study.

Initial Studies

In November 1972, the F-15 System Program Director initiated efforts to form the Turnover and Transition Working Group (TTWG) as called for by AFR 800-4. The PM placed the TTWG in the Plans and Programs Division of the Program Control Directorate. This group then went out to Air Force Logistics Command (AFLC), Tactical Air Command (TAC), Air Training Command (ATC), McDonnell Aircraft Corporation (McAir), and the Air Force Plant Representative Offices (AFPRO) for inputs into a Turnover Plan. Much effort at this time was also directed towards obtaining precise and acceptable definitions for "acceptance" and "turnover." The F-15 SPO project officers could not find any written procedures for the turnover of an aeronautical system.

Decision to Form a SATAF

The System Program Director, Major General Benjamin N. Bellis had been earlier assigned to the MATADOR and MACE MISSILE programs and witnessed the problems they had phasing into the inventory. He later was assigned to the THOR and ATLAS Ballistic Missile Programs which used the SATAF method of organizing and activating the missile sites and was impressed with the way these groups pulled all the resources together for a smooth transition. He felt that the Deployment of the F-15 weapon system was an equally complicated task and was sure that the SATAF concept would be applicable.

SATAF Formation

The airframe project manager of the Projects Division was assigned the responsibility of organizing a SATAF for the F-15. The only useful guidance that could be uncovered was the previous establishment of a similar but smaller working group used by the AGM-69 (SRAM) SPO in 1971. With information obtained from the originator of the SRAM group, plus direction contained in AFSC/AFLC Pamphlet 800-11, the F-15 SATAF was formed by Lieutenant Colonel McGrath, the designated chairman. The following message was sent on 6 November 1973 to announce the SATAF formation:

> "the initial complement of F-15 aircraft will be delivered to the TAC Combat Crew Training Squadron at Luke AFB soon. Activation of the Luke facility will require the timely availability of all necessary resources. To provide a central focal point for this effort, an F-15 Site Activation Task Force (SATAF) will be organized. The SATAF will consist of representatives of TAC, AFLC, ATC, the F-15 Joint Test Force, McDonnell Douglas AFPRO, and the F-15 SPO.

The objective of the F-15 SATAF is effective management of our resources to insure:

a. Availability of facilities, maintenance and training equipment, and personnel.

b. Completion of spares provisioning.

c. Availability of Aerospace Ground Equipment.

d. Aircraft acceptance and delivery.

e. Availability of technical publications.

Each of the above objectives is the responsibility of functional managers in the respective area. The SATAF will consolidate the several tasks under one project group. The chairman of the SATAF will be the F-15 SPO representative, LT Colonel Daniel H. McGrath, or his alternate, Major David J. Teal. Each other action agency is requested to specify a SATAF member and an alternate. SATAF members must be provided sufficient authority for command coordination to accomplish SATAF objectives."

SATAF Membership

Upon receiving responses to his message, LT COL McGrath and the SPO prepared the following SATAF membership list: (As extracted from CAPT Abrams thesis) (Reference #1, page 111-112)

1. The F-15 SPO (including the following divisions - Projects, Configuration Management, Test and Deployment, Engine Project, Program Control, Integrated Logistics Support, Procurement and Production, and Engine Programs).

2. The Tactical Air Command (Headquarters Requirements, Logistics, and Plans, the 58TFTW at Luke AFB, the appropriate TAC Numbered Air Force, and the TAC liaison office in the SPO).

3. The AFLC Air Materiel Areas (now called Air Logistics Centers) responsible for the system support: Warner Robins for the air vehicle and San Antonio for the engine.

4. The Air Training Command (Headquarters Training Directorate and the ATC liaison office in the SPO).

5. The McDonnell Aircraft Company (McAir) - the prime contractor for the F-15.

6. Pratt and Whitney Aircraft (P&WA) - the prime contractor for the F-15's engine.

7. The Air Force Plant Representative Office (AFPRO) at McAir and the plant representative offices at the P&WA plants.

8. The Air Force Flight Test Center where the F-15 Joint Test Force (JTF) was located.

The most immediate advantage of the SATAF organization was considered to be the establishment of "by name" points of contact for coordinating F-15 affairs relating to activation.

Thus, the initial F-15 SATAF was established to activate the 58th Tactical Fighter Training Wing (TFTW) at Luke AFB, Arizona. These key people applied their expertise and hard work and on 14 November 1974, when the 58 TFTW received the first F-15 for the USAF, they were prepared and their acceptance was conducted in an orderly manner which reflected the professionalism and solid management of this program. There had been problems, but they were surfaced soon enough to be delt with prior to becoming insurmountable. New problems will arise in future activations as each will be slightly different. The SATAF machinery had been well established,

its members had gained experience and they were ready to solve these problems also.

Present and Future SATAFs

Each new location or "site" that will receive the F-15 will have a SATAF established for its activation. The following list identifies the SATAFs that have been formally established at this time:

SATAF I - Activated the 58 TFTW at Luke AFB, Arizona on 14 November 1974

SATAF II - Activated the 1 TFW at Langley AFB, Virginia on 10 January 1976

SATAF III - Will activate a site in the United States Air Force in Europe (USAFE) in 1977.

SATAF IV - Will prepare Nellis AFB, Nevada.

Others - (a) Will be established as time approaches for the respective activations as presented in the USAF F-15 Program Plan.

(b) The SATAF Concept and the F-15 SATAF people are also being used to prepare allied countries to receive the F-15 under Foreign Military Sales (FMS) agreements.

SATAF General Officer Steering Group

This group, consisting of general officers from each of the four commands participating in the site activation efforts, was established to provide top level authority and attention to the solving of the intercommand problems which the SATAF identified. It is used only on problems that are very "pressing" or cannot be resolved at the SATAF level.

Since this study will use the activation of the 1 TFW at Langley AFB, Virginia as a model, Chapter IV will deal specifically with SATAF II.

SECTION IV

SATAF PROCEDURES

Planning/Programming

The mission of the F-15 SATAF II was to assure timely availability of all resources necessary for the operation of F-15 aircraft at Langley AFB, Virginia beginning in January 1976. To accomplish this would require extensive planning, coordination and resource management. Thus, SATAF II was officially formed in December 1974, a full year prior to the planned activation date.

Some important actions had taken place even before this. For example, it was learned from the SATAF I that due to the dollar constraints and the time required to process work requests through the Military Construction Program, facilities must be reviewed and all requirements identified at the very earliest time. Consequently, a joint F-15 SPO and McAir Facilities Survey Team conducted an assessment of the Langley AFB facilities in September 1974. A report of their findings was presented on 6 September 1974, to both TAC Headquarters and the Commander of the 4500 Air Base Wing which would be providing support to the 1 TFW. This report established a facilities "Base Line" with associated need dates and would be used to bring the Langley facilities and utilities up to F-15 requirements. This effort was complicated by the fact that the C-130 aircraft wing that was to vacate Langley AFB to make room for the F-15 had been delayed and would now interfere with the facilities updating schedule. Problems such as this were first worked by the SATAF as an action item and then, if need be, passed on to the Steering Group or even the AIR STAFF for resolution.

The next key effort of the SATAF was for its chairman to establish a date for the first meeting, and send messages to all concerned, requesting their attendance and the items they wished to have included on the agenda.

Meetings and Actions

Prior to the first meeting of SATAF II, the Chairman was required to prepare an agenda, insure that all the necessary participants would attend, and to establish a proposed program Key Event Chart . These events would be reviewed, amended as necessary, and adopted by all involved.

The first SATAF II meeting was held at the site activation location, Langley AFB, on 14-16 January 1975.

The SATAF Chairman opened the meeting by presenting the Agenda or Activities to be accomplished. (See Chart #1, page 15)

The Chairman stressed that the primary purpose for the first meeting was to bring everyone up to the same level of information. This would be accomplished by presentation of the facilities and plans reviews. The F-15 Program Orientation would identify the key players and key events. An equally important purpose of the meeting was to insure that everyone agreeded upon the key events required to successfully activate the 1 TFW. Chart #2 portrays the initial SATAF II Key Events. Major areas of concern are listed along the left side. They are broken down into major elements which are assigned an Office of Prime Responsibility (OPR), and are locked into a time phase which was established by backing away from the required date the necessary time needed for implementation. The key events on this chart were agreed upon and commited to by the respective OPR's. (New items could be added at any of the five meetings scheduled as shown in Block 2.)

SATAF II ACTIVITIES

- FACILITIES REVIEW
- PLANS REVIEW
- F-15 PROGRAM ORIENTATION
- PROBLEM AREA IDENTIFICATION
- WORKING GROUPS
- ACTION ITEMS
- PROBLEM RESOLUTION

CHART #1

SATAF II KEY EVENTS

EVENT	OPR	74 N	74 D	CY 75 J	CY 75 F	CY 75 M	CY 75 A	CY 75 M	CY 75 J	CY 75 J	CY 75 A	CY 75 S	CY 75 O	CY 75 N	CY 75 D	CY 76 J	CY 76 F	CY 76 M	CY 76 A	CY 76 M	CY 76 J	CY 76 J	CY 76 A	CY 76 S	CY 76 O	CY 76 N	CY 76 D
1. AIRCRAFT DELIVERY																4	7	6	7	9	8			*7	9	9	
																4	11	17	24	33	41			48	57	66	7
																			*FROM 58 TFTW							
2. SATAF																											
FORMATION	(SPO)		△																								
MEETINGS	(SPO)			△			△			△			△		△												
GEN OFF STRG GP	(SPO)									△					△												
QUAD CMDR REV	(SPO)									△																	
3. FACILITIES																											
REVIEW	(SPO)		△																								
CONST BEGIN	(TAC)		△																								
INITIAL CONST COMP	(TAC)														△												
4. MANNING																											
UDL ESTAB	(TAC)		△																								
INITIAL CADRE	(TAC)							△																			
BEGIN MANNING	(TAC)								△																		
CETS ON CONTRACT	(AFLC)								△																		
WSLO IN PLACE	(AFLC)											△															
SPO LIASON ESTAB	(SPO)													△													
5. PLANS																											
TAC P-PLAN	(TAC)		△																								
4500 ABW P-PLAN	(TAC)		△					DRAFT			FINAL																
TFW P-PLAN	(TAC)							△			△																
DEL PLAN UPDATE	(SPO)					△																					

CHART #2

SATAF II KEY EVENTS (Cont'd)

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EVENT	OPR	74		CY 75											CY 76										
		N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
6. AGE																											
TA AUTH	(TAC)									△																	
AGE REQUISITION	(TAC)									△																	
ASI's COMPLETE	(AFLC)										△																
AGE IN PLACE	(SPO)										△(TNG)			△(TFW)													
7. TRAINING / TNG EQ																											
MX TNG EQ IN PLACE	(ATC)										△																
TPR TO ATC	(TAC)				△																						
FTD SCHED COMPL	(ATC)					△																					
BEGIN FTD	(ATC)										△																
TYPE II TNG START	(ATC)										△																
SIMULATOR OPN'L	(SPO)																	△									
CPT / EPT	(SPO)													△													
8. TECH PUBS / DATA																											
ORDER PUBS	(TAC)			△(FTD)							△(TFW)																
IN PLACE	(SPO/AFLC)										△(FTD)			△(TFW)													
MOD HAND TOOL DWG	(AFLC)										△																
9. SPARES																											
ISSL UPDATES	(AFLC/TAC)					△			△		△																
ISSL PROGRAMMED	(AFLC)									△																	
ISSL REQUISITION	(TAC)										△																
ISSL LAID IN	(AFLC)													△													
10. REQUIREMENTS																											
MILAP OPN'L	(TAC)													△													
FASTFAX OPN'L	(SPO)										△																

CHART # 2 (CONT'D)

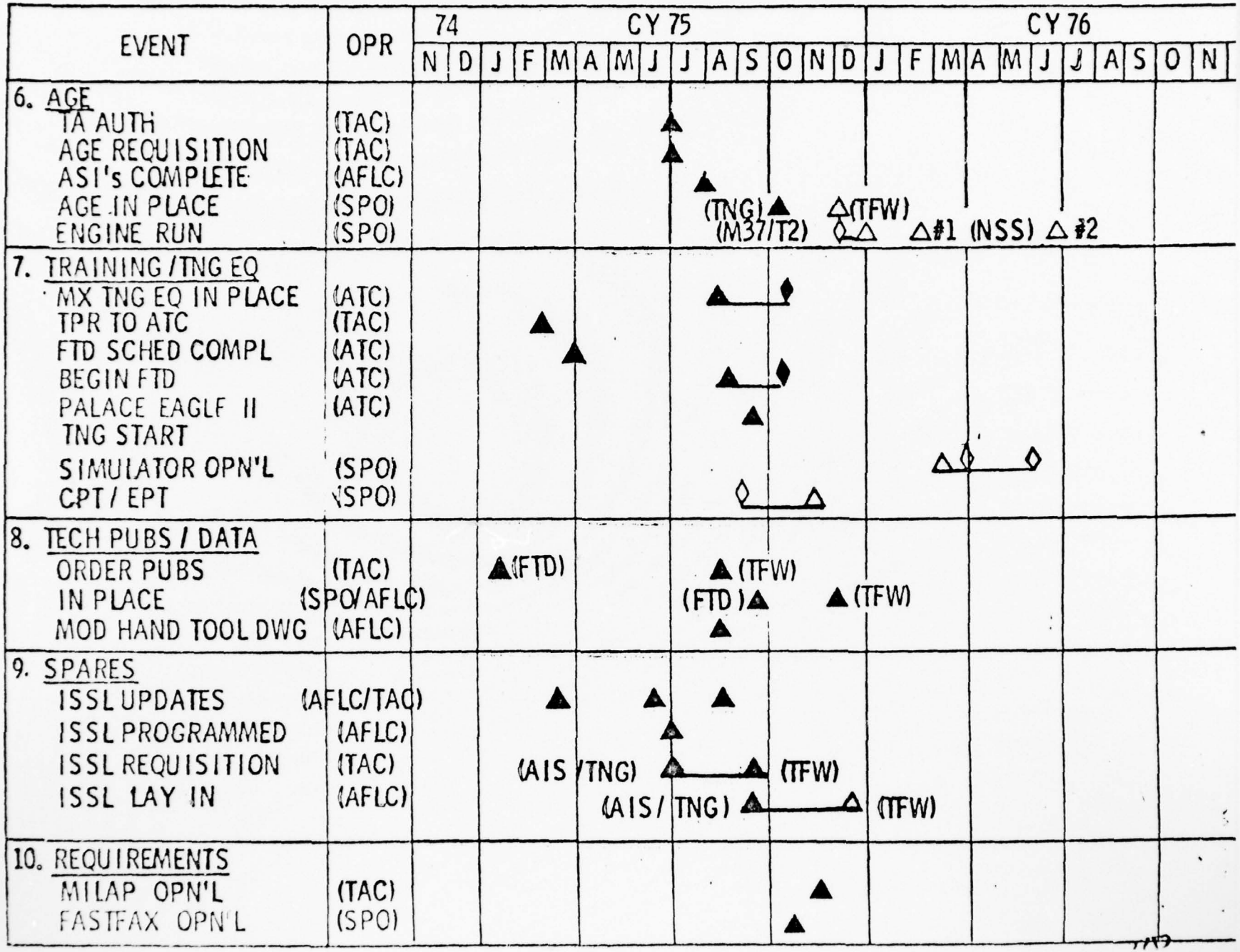
SATAF II KEY EVENTS

REVISED ON 9 DEC 75

EVENT	OPR	74		CY 75											CY 76									
		N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
1. AIRCRAFT DELIVERY													cum			5	5	6	8	6	7	9	7	7	7	5
																5	10	16	24	30	37	46	53	60	67	72
2. SATAF																										
FORMATION	(SPO)	▲																								
MEETINGS	(SPO)			▲			▲			▲			▲		▲											
GEN OFF STRG GP	(SPO)											▲														
QUAD CMDR REV	(SPO)												▲													
3. FACILITIES																										
REVIEW	(SPO)	▲																								
CONST BEGIN	(TAC)	▲																								
INITIAL CONST COMP	(TAC)														▲											
4. MANNING																										
UDL ESTAB	(TAC)	▲																								
INITIAL CADRE	(TAC)						▲																			
BEGIN MANNING	(TAC)								▲																	
CETS ON CONTRACT	(AFLC)								▲																	
WSLO IN PLACE	(AFLC)											◇	◇		◇											
SPO LIAISON ESTAB	(SPO)													▲												
AFETS START	(TAC)												▲													
5. PLANS																										
TAC P-PLAN	(TAC)	▲																								
4500 ABW P-PLAN	(TAC)	▲					DRAFT			FINAL																
TFW P-PLAN	(TAC)						▲			▲																
DEL PLAN UPDATE	(SPO)						▲			▲																

CHART #3

SATAF II KEY EVENTS (Cont'd) REVISED ON 9 DEC



Thus, a baseline of activities was established and all efforts were now coordinated towards reaching specific goals at definite times. As events were accomplished or rescheduled, they would be so annotated.

As a comparison, Chart #3 reveals the final SATAF II, Key Events as revised for the fifth and final meeting which was held in December 1975, just prior to activation on 10 January 1976. The two major elements not provided are portrayed in areas 6 (AGE) and 7 (Training /TNG EQ). The M 37/T2 noise suppressor had run into design problems and would not be available for installation until January 1976. This would not make it available for checkout until the end of February 1976. The engines would have to be trimmed unsuppressed, only during specific times, and in designated areas. Training was to be affected by design problems also. (See Chart 3, Item 7). The flight simulator was not to be delivered until mid 1976. Thus, all simulator training would have to be worked around; mostly, by utilizing nonscheduled aircraft. (See pages 18-19)

Returning to the procedures of the first meeting; after presenting the program orientation and key events, the chairman requested that problem areas be identified. As specific problems were brought forward they were resolved on the spot whenever possible. However, many were of such detail that they were referred to the special working groups that would convene the following two days. These working groups attempted to solve the problems in their respective areas:

a. Plans and Programs

b. Facilities

c. Support Equipment

d. Training and Personnel

e. Spares and Supply

f. Technical Publications

If they could not solve the problems by the end of their working group sessions, they determined the required actions, the need date, and who should be the OPR. These actions were formally written up and presented to the SATAF Coordinator to be included in the minutes of the present meeting and controlled and tracked until completion. Chart No. 4, presents a sample SATAF Action Item with its number assigned (Lang 18-F). Chart No. 5, shows the formal tracking and reporting of "Action Item #18F" pertaining to Igloo Storage Facilities. It was closed upon completion of the required action on 23 April, just prior to its suspense date of 1 May. (See pages 22-23)

Of course, some action items were not completed by the suspense dates assigned. However, because the SATAF members and even their supervisors knew they had outstanding actions, these items were receiving much visability and attention. The SATAF Chairman followed up on the action items between meetings via telephone calls. At each meeting the outstanding Action Items were reviewed, reported upon, and if all members agreed that the action was complete, it was closed out. At the time of activation, any item that had not been closed out required a work around.

One pitfall to this very structured process of management came from the tendency for some organizations to hold their problems until the next meeting. This delayed action on the problems and sometimes involved all the SATAF members in a superficial situation that could have easily been cleared up between two organizations.

LANGLEY F-15 SITE ACTIVATION TASK FORCE (SATAF)

ACTION ITEM # LANG- 18F

INITIATED ON: 15 Jan 75

INITIATED BY: TSgt Kimbrough

OPR: TAC/LGMW

CLOSED ON:

ACTION ITEM WORKSHEET

PROBLEM STATEMENT: Igloo Storage

Renovation of existing munitions storage (igloo) facilities will provide only approximately 1/3 of all storage requirements until completion of MCP projects in CY 1977.

IMPACT:

Using present 10 storage bays on loan from ADC and the renovation there is only a 1/3 storage capacity. No items can be stored in renovated area if not completed and secure.

REQUIRED ACTIONS/ACTION AGENCIES:

1. Determine when munitions items can be expected to be received on station.

2. Determine how and when storage requirements will be met and assess impact and alternate procedures until facility is complete.

Action Agency: TAC/LG

Suspense Date: 1 May 75

CHART #4

8k5

F-15 SITE ACTIVATION TASK FORCE
LANGLEY ACTION ITEMS (Cont'd)

ACTION ITEM	SHORT TITLE	ACTION ASSIGNED TO	SUSPENSE DATE	ACTION COMPLETED
17F	ENGINE I & R SHOP	TAC / DE	1 MAR	20 FEB
18F	IGLOO STORAGE	TAC / LGMW	1 MAY	23 APR
19T	FTD ENGINE AGE	YFM	1 MAR	28 OCT
20T	ENGINE TRAINING AREA	F-15 P.O.	1 MAR	29 JAN
21T	ENGINE O & I TRAINING	TAC / DPPTT	1 MAR	27 FEB
22P	TFW PERSONNEL IDENT	TAC / DPR	1 MAR	23 APR
23P	CETS PROGRAM	TAC / LG	1 JUN	8 DEC
		AFLC	1 JUL	8 DEC
24R	316 TAW MOVE	TAC/XPP	1 APR	1 APR
25R	DOWNGRADE P-PLAN	TAC / XPPC	1 APR	1 APR
26A	J-75 SUPPORT FOR M37/T2	YFM	10 MAY	24 APR
27A	AGE TRACKING/REQUISITIONING	W/R S/A	7 AUG	8 AUG
28S	SPARE ENGINE DELIVERIES	YFL	22 JUL	15 OCT
29S	AIS CHECKOUT	W/R ALC	22 JUL	22 JUL
		W/R ALC	15 AUG	15 OCT
		YFM	22 JUL	22 JUL
30R	MILAP PROGRAM	TAC/LGMM	22 JUL	15 OCT
31S	BENCH STOCK BINS	F-15 PROJ O	1 JUL	30 JUN

CHART #5

The five SATAF II meetings were conducted in this same manner. As the activation drew nearer and reaction time became less, interest grew.

Reviews/Controls

As the activation date approached, there was also a requirement for additional reviews and controls to insure nothing had been overlooked.

In addition to the General Officer Steering Group review held in September 1975, a "Tri-Commanders Conference" was held in October. This involved the Commanders of AFSC, the acquisition command; AFLC, the support command; and TAC, the operating command. The author feels, that these high powered meetings actually were a review of progress instead of an actual problem solving meeting. This could be directly attributed to the professional manner that the SATAF was able to act as a catalyst between the functional organizations and provided solutions to situations as they arose, instead of letting them become problems.

SECTION V

RESULTS/LESSONS LEARNED

Results of SATAF Meetings

The results of the previous four SATAF meetings were evident in the fifth and final meeting held in December 1975, just prior to the activation in January 1976. This final meeting was only a formality in many areas. However, there were still some items that needed aggressive attention. These items were in areas which typically caused frustration. An example, is the unauthorized changes in the design of facilities which lowered ceilings, relocated wall outlets, etc.

On 10 January 1976, when the First Tactical Fighter Wing received their first F-15, they were well prepared and the transfer was accomplished with few problems. To determine just how successful the SATAF had been, the author interviewed some of the key participants of the activation. The interviews were conducted in October and November of 1976, after approximately eleven months of successful operations and support.

The person most closely involved with and ultimately responsible for the activation was Colonel Larry Welch, the Commander of the 1 TFW. COL Welch evaluated the activation as being "highly successful." He stated,

> "That the main area of concern was the initial spares support for test equipment such as the Avionics Intermediate Station (AIS)."

The area of spares for support equipment has been historically neglected during acquisition. Many of the leaders in the business of weapon system acquisition feel strongly that contractor support should be utilized until the system has stabilized and the maintenance procedures have been finally established. This precludes the purchase of costly test/support equipment

that will be either discarded or require extensive modification. A parallel problem is sometimes created here, however, for it becomes increasingly difficult to do without the contractor's experts.

When asked if there were any major actions that he would do differently, COL Welch said that he,

> "would have liked to have had a team or cadre of people from the F-15 test program come to Langley AFB during the initial facilities construction to insure that they were being set up correctly."

These people would have had experience with the F-15 maintenance procedures and possibly could have prevented some of the interface problems. COL Welch seemed well satisfied with the SATAF II procedures, but noted a lack of action by other than SPO and AFLC personnel between the meetings. He also stated,

> "that the SATAF members tended to be too concerned with other activations while they should have been addressing only the current one."

The author feels that it is very important for the SATAF members to consider all the activations, but cautions that they must emphasize their concern for the current site when dealing with those respective persons.

Warner Robins Air Logistics Center (ALC) is the Systems Manager (SM) for the F-15 and as such has the responsibility of supporting this system throughout its lifecycle. (The author has worked closely with COL Homer Terry, the designated SM and Mr. Jim Faulkner, the Chief of the F-15 Operations Division during the past two years while assigned to San Antonio ALC as the F100 PW100 Engine Propulsion Systems Manager.)

From their viewpoint, the key persons of the SM shop felt that the deployment of the F-15 Aircraft to Langley AFB and the activation of the 1 TFW was very successful. They also identified the late design and delivery of the base level test equipment as their major concern. Mr. Faulkner, who has been an officially designated and active member of the F-15 SATAF from its beginning, suggested the following improvements:

a. Restrict the attendance at the meetings. He feels that only the assigned/official members plus one or two functional experts, as needed, should be involved in the actual meetings.

This would condense and expedite the meetings, however, the author feels the education of and interface with the numerous attendees that would be lost is highly valuable for the positive attitude towards and the acceptance of the new system. COL Terry also agreed that this interface is worth the extra time and attention it requires.

b. Mr. Faulkner suggests, that the SATAF meetings could be held less frequently and not necessarily at the activation site. He also points out, that they could sometimes be held as a portion of the F-15 Field Support Meetings, which are conducted to deal with all matters of supporting the F-15 weapon system.

This is a viable suggestion, but due to the informational and acceptance reasons stated previously, the author feels that a complete shift in this direction would not be productive. A compromise of the two may prove satisfactory.

c. Mr. Faulkner concluded his comments by expressing his preference for the "Weapons Phasing Group" approach. This is a group of high ranking individuals from the involved AF Commands that are briefed on the current problems by the OPR's. If the solutions presented aren't satistactory, this small group directs corrective action "on the spot."

Both approaches are systematic/Program Manager methods for identification of the problems, providing the solutions, and tracking their accomplishment.

COL Terry is a strong advocate of the SATAF Approach and he also stated that the SATAF II was extremely successful. When asked what he would do differently, COL Terry said he, "couldn't think of anything. Why challenge success?" he asked. COL Terry was quick to point out however, "that each activation has several individual requirements and differences and the planning, programming, and scheduling must be tailored to fit them." Because of these differences, COL Terry felt, "that the current frequency of meetings was justified." It is interesting to note that COL Terry has recently set up a Depot Activation Task Force modeled after the SATAF, to insure that the various AFLC Depots responsible for repair of F-15 components become organically capable as soon as possible.

Major General Robert Mathis, who was the F-15 Program Manager throughout the SATAF II planning and implementation judged the SATAF II activation as "very successful." He also confirmed himself as a strong advocate of the SATAF approach.

When asked what areas concerned him most, during the activation, GEN Mathis said, "no one thing, but principally the overall assurance of getting everything working together." The one thing GEN Mathis related that he would have liked to have done differently, was better documentation of the experience gained, to provide for increased corporate memory. The author feels that a good indication of the success of the F-15 Acquisition and deployment, as viewed by the aviation fraternity, may be reflected in the fact that GEN Mathis was recently presented the Daedalian Award for his outstanding efforts.

LT COL Dan McGrath, the F-15 SATAF Director has seen both SATAFs I and II completed and is presently deeply involved with SATAFs III and IV. When asked about the success of the activation of the 1 TFW he responded very positively and expressed his feelings that it had been much smoother than SATAF I. The experience gained and lessons learned evidently had payed off. COL McGrath has received some formal suggestions for increasing the effectiveness of the SATAF and said that he would be, "very interested in receiving a copy of this study."

The author feels that COL McGrath has done an outstanding job to date and hopes that this study in some way can help him in directing future SATAFs.

Major Fredric Abrams has performed the duties of the F-15 SATAF Coordinator through both the Luke AFB and the Langley AFB Activations. During this time, he has also written the thesis referenced in this study. (Reference #1) When contacted, MAJ Abrams was very helpful in instructing the author on how to obtain a copy of his thesis and expressed his feelings of satisfaction towards the SATAF II activation. He also stressed the lessons learned from SATAF I and how they helped for SATAF II. MAJ Abrams is working on future SATAF's and asked for a copy of this study for "feedback." In preparing this study, the author has extensively used MAJ Abrams' Thesis and the F-15 minutes, both of which he is primarily responsible for. A sincere thanks is extended to MAJ Abrams and hopefully he can find this study of some value.

Lessons Learned

Some of the major lessons learned were:

a. You can't surface problems too soon. The SATAF program management approach ferrets out problems early in the activation planning phases and causes action to be taken on items that might otherwise be overlooked and "fall through the crack."

b. Early involvement by all concerned is vital. The SATAF insures both involvement and commitment at least "lead time away" for all required agencies.

c. Experience is invaluable. The SATAF establishes a body of expertise, trains new members, and provides a "corporate memory" for the actions necessary to accomplish a smooth and successful deployment.

d. No problem is insurmountable. The SATAF was able to bring all the necessary functional barons together, provide the medium for communications, and act as the catalyst to cause the actions necessary to solve even the most challenging situations.

e. Problems are bound to appear. The SATAF can not keep problems from occurring. It can only provide a well established method for dealing with them in a systematic manner.

SECTION VI

SUMMARY/CONCLUSION/RECOMMENDATIONS

Summary

The Deployment Phase (delivery of a weapon system to the user)is the final and most indicative phase of the effectiveness of the acquisition management involved. To neglect this phase, will almost surely stain the well earned image previously created by the Program Office's relentlous efforts throughout the previous phases of the acquisition cycle. The only way to insure a successful turnover or transition is by planning, programming, and controlling the actions required. The systematic approach provided through the use of the program management concept assigns responsibilities to specific individuals. It can be called a SATAF or some other name, but for large and complex programs, a special group needs to be formally established to provide the medium for identifying the potential problems and assigning them to the responsible functional organizations for their correction.

Conclusion of Study

This study has provided the author with an in-depth appreciation for the importance of the handling of the turnover of a weapon system. Without a detailed turnover plan (established in writing) and an organization to monitor it, make tradeoffs, and establish workarounds, the activation is destined to be a panic at best and possibly a failure. Problems are inevitable and you must have a system established to cope with them.

Recommendations

The author recommends the SATAF approach for control of the transition phase of all sizable acquisition programs. Early involvement and commitment of necessary organizations is essential. AFSC Pamphlet 800-3, dated 9 April 1976, now provides the directive that has been lacking. The F-15 SATAF has proven itself and provided material in the form of lessons learned, that should be of use to all future Program Managers. An in-depth study on the application of the SATAF approach to FMS would provide a profitable area for further ISP effort.

LIST OF PERSONS INTERVIEWED

1. Major General Robert Mathis, F-15 Program Manager (1973-76), Andrews AFB, Maryland, November 1976.

2. Colonel Larry Welch, Commander 1 TFW, Langley AFB, Virginia, October 1976.

3. Colonel Homer Terry, Director, Integrated Logistics Systems/F-15 SPO, (1971-1975), F-15 Systems Manager (1975-Present); Warner Robins ALC, Georgia, November 1976.

4. Lieutenant Colonel Daniel McGrath, F-15 SATAF Director, F-15 SPO, Wright-Patterson AFB, Ohio, October 1976.

5. Major Fredric Abrams, F-15 SATAF Coordinator, F-15 SPO, Wright-Patterson AFB, Ohio, October 1976.

6. Mr. Jim Faulkner, Operations Branch Chief of F-15 Systems Management Division, Warner Robins ALC, Georgia, October 1976.

APPENDIX A

LIST OF ABBREVIATIONS

ADC	Air Defense Command
AFLC	Air Force Logistics Command
AFPRO	Air Force Plant Representative Office
AFR	Air Force Regulation
AFSC	Air Force Systems Command
AIS	Avionics Intermediate Station
ALC	Air Logistics Center
ATC	Air Training Command
DDC	Defense Documentation Center
DOD	Department of Defense
DSMC	Defense Systems Management College
FMS	Foreign Military Sales
ISP	Individual Study Program
JTF	Joint Test Force
McAir	McDonnell Aircraft Company
OR	Operational Ready
OPR	Office of Prime Responsibility
PM	Program Manager
PMRT	Program Management Responsibility Transfer
RDT&E	Research Development Test and Evaluation
SAMSO	Space and Missile Systems Office
SATAF	Site Activation/Alternative Task Force
SM	Systems Manager
SPO	Systems Program Office
TAC	Tactical Air Command
TTWG	Turnover and Transition Working Group
USAF	United States Air Force
USAFE	United States Air Force in Europe
1 TFW	First Tactical Fighter Wing

This list of Abbreviations is furnished as an aid to the reader to preclude going back into the text.

APPENDIX B

BIBLIOGRAPHY

1. AFIT THESIS, "Weapon System Acquisition:
The Process, Problems, and a Management Approach,"
Captain Fredric L. Abrams (Air Force Institute of Technology),
74D-1 Wright-Patterson AFB, Ohio, October 1974. (Defense
Documentation Center - ADB001203L)

2. DSMC Study Project Report, PMC 72-2,
"USAF F-15 Fighter Program Management
Innovations and Lessons Learned,"
Major David J. Teal, USAF,
Fort Belvoir, Virginia, November 1972

RELATED MATERIAL

Minutes from F-15 SATAF II Meetings #1-5, F-15 SPO,
Wright-Patterson AFB, Ohio
January - December 1975.